



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/705,455

11/12/2003

Yusaku Fujii

1075.1237

6699

21171 7590 12/11/2008
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

KOZIOL, STEPHEN R

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

12/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/705,455	Applicant(s) FUJII, YUSAKU	
	Examiner STEPHEN R. KOZIOL	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/22/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-12, 14, 16-19 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12, 14 and 16-19 and 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/04/2008</u> | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Amendments and Remarks filed 08/22/2008 have been entered and considered. Claims 1, 20-22, 24 and 26 have been amended without adding new subject matter. New grounds of rejection are set forth herein; accordingly, this action is made non-final.

Foreign Priority

2. A claim of foreign priority to Japanese patent application JP2002-327910 filed November 12, 2002 is acknowledged.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22-23 are rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory “process” under 35 U.S.C. § 101 must (1) be tied to another statutory category (such as a *particular* apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (See *In re Bilski*, ___ F.3d ___ (Fed. Cir. 2008) (*en banc*). See also the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled Clarification of “Processes”¹ under 35 U.S.C. § 101). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

¹ Link to the memo: http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/section_101_05_15_2008.pdf or, from uspto.gov: Policy and Law→Patents→Memorandum to the Examining Corps→ Clarification of “Processes” under 35 U.S.C. § 101.

In order to be “tied-to” another statutory category, structure associated with another statutory category must be positively recited in a step or steps significant to the basic inventive concept. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008) (*en banc*) “A claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” *Id.* at 10-11. Structure in statements of intended use or purpose, whether in the claim or preamble, is not sufficient. “[T]he involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity.” *Id.* at 24.

- Structure recited as part of insignificant pre and post solution activity is not sufficient (i.e. the structure must be significant to the basic inventive concept).
- The other statutory category must be “positively” recited in the claim, not implied by the claim. Structure will not be read from the specification into the claim.

Instant claims 22-23 recite a “process” that fails to recite structure that is significant to the basic inventive concept. Hence, claims 22-23 do not meet the “tied-to” criteria requiring structure to be positively recited (not implied) in the process claim. One way to overcome the present 35 U.S.C. § 101 rejection may be to amend claim 6 to positively recite the “particular machine” used to perform the steps of the process.

The basic idea is that a process must be tied to something real (i.e., another statutory category), and not be an idea or concept separated from or floating above or apart from real things. According to the Office's present understanding, any “process” claim must show a “tie” to a another statutory category (e.g. through a particular machine).

For a more detailed explanation of this or other Office policy, Applicants may refer to the Office of Patent Legal Administration (OPLA):

- (571) 272-7701 – General patent examination legal and policy guidance

4. The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 24-25 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter as follows. Independent claim 24 defines a “program” embodying functional descriptive material (i.e., computer executable code). However, the claim fails to define a “computer-readable medium or computer-readable memory” and so is non-statutory (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any

functionality of the recited program. The examiner suggests amending the claim(s) to embody the program on “computer-readable medium” or equivalent; assuming the specification does NOT define the computer readable medium as a “signal,” “carrier wave,” or “transmission medium” which are deemed non-statutory (refer to “note” below). Any amendment to the claim should be commensurate with its corresponding disclosure.

Note: “A transitory, propagating signal ... is not a “process, machine, manufacture, or composition of matter.” Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” (In re Nuijten, 84 USPQ2d 1495 (Fed. Cir. 2007)). Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a “signal”, the claim as a whole would be non-statutory. Should the applicant’s specification define or exemplify the computer readable medium or memory (or whatever language applicant chooses to recite a computer readable medium equivalent) as statutory tangible products such as a hard drive, ROM, RAM, etc, **as well as** a non-statutory entity such as a “signal”, “carrier wave”, or “transmission medium”, the examiner suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc.

Merely reciting functional descriptive material as residing on a “tangible” or other medium is not sufficient. If the scope of the claimed medium covers media other than “computer readable” media (e.g., “a tangible media”, a “machine-readable media”, etc.), the claim remains non-statutory. The full scope of the claimed media (regardless of what words applicant chooses) should not fall outside that of a computer readable medium.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 2-8, 10-12, 14, 16-19 and 22-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1, 22, 24 and 26 each recite “and/or”. Recitation of the phrase “and/or” renders each of claims 1, 22, 24 and 26 (and all claims depending therefrom) indefinite at least because it is not clear from the remaining claim language what is meant by “and/or” (i.e. “and/or” can mean one or more of: “and,” “or,” “and or or,” “exclusive or,” etc.). Hence, the metes and bounds of independent claims 1, 22, 24 and 26 are not clearly defined. To overcome the present 35 U.S.C. § 112, second paragraph rejection please clarify what meant by the claim limitation “and/or”.

Allowable Subject Matter

7. Claims 20 and 21 are allowed. The following is a statement of reasons for allowance: the prior art of record, individually or combined, fails to fairly teach or suggest the limitation of an authentication apparatus comprising a synthesis section for synthesizing, substantially contemporaneously and subsequent to extraction of characteristic portion data of a previously sampled partial image and using sampled partial images forming less than an entire image of the portion of the organism sampled by said sampling section. Similarly, claims 1, 2-8, 10-12, 14, 16-19 and 22-27 would be allowed if amended to overcome the 35 U.S.C. § 101 and 35 U.S.C. § 112 second paragraph rejection set forth herein.

Contact

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Koziol whose telephone number is (571) 270-1844. The examiner can normally be reached on Monday - Friday 9:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached at (571) 272-7413 . Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7332.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/srk/
12/05/2008

/Samir A. Ahmed/
Supervisory Patent Examiner, Art Unit 2624